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DIVISION OF BIOLOGICAL SURVEY

DIRECTIONS FOR THE DESTRUCTION OF PRAIRIE DOGS.

Of the various agents that have been used for the destruction of prairie dogs, poisoned grain and bisulphide of carbon have been found, in the preliminary experiments conducted by the Biological Survey, the most effective and economical.

Poisoned grain is the less expensive of the two and is most efficient in early spring when food is scarce. At this season, by its proper and systematic use, 80 to 90 percent of the animals may be destroyed at a cost of about 10 cents per acre. The remainder may be killed by the use of bisulphide of carbon, the cost of which will vary according to the number of inhabited holes. The bisulphide should be used only in burrows which the animals have been seen to enter immediately before it is applied. Should other prairie dogs appear later in the season, they may be killed by the bisulphide.

In this way, if sufficient attention is given the matter, it will be found possible to destroy practically all the prairie dogs on cultivated ranches or other areas of moderate extent; but in the case of large cattle ranges, where the area occupied by the animals is of indefinite extent, it remains to be ascertained whether the cost per acre of destroying the animals is greater or less than the value of the grass.

PREPARATION AND USE OF POISONED GRAIN.

Among recent experiments, this Division has used with success the formula recommended by Prof. A. T. Peters of the Nebraska Agricultural Experiment Station, which is as follows:

Dissolve three ounces of sulphate of strychnine and half a pound of cyanide of potassium in one quart of boiling water. Add two quarts of molasses and one teaspoonful oil of anise and mix thoroughly. Pour this mixture over a bushel of wheat and stir well, at the same time sprinkling in four pounds of finely ground corn meal. A tablespoonful of this poisoned wheat should be sprinkled within the entrance of the burrow, or, if in localities where there is no possible danger to cattle or horses, it can be scattered about the mouths of the burrows. The best results are obtained when the mixture is fresh.

BISULPHIDE OF CARBON.

Bisulphide of carbon is a volatile liquid and rapidly loses its strength on exposure to the air; hence it should be kept in tightly corked bottles or cans. It should be used in the following manner:

Pour a tablespoonful of crude bisulphide on a piece of horse manure, a lump of dirt, or other absorptive material; throw this as far as possible down the burrow and close the orifice immediately. Or the desired quantity may be placed in a shallow dish of any kind, or even in a receptacle made by folding a piece of waterproof paper, and thrust down into the burrow, after which the mouth of the burrow should be closed, as above described. Bisulphide can be used to best advantage after a rain, when the interspaces in the soil are filled with water so that the fumes are less readily diffused into the surrounding ground. This, however, is of much less consequence in the case of prairie dogs, which are deep-burrowing animals, than in the case of pocket gophers and ground squirrels, whose burrows and tunnels, as a rule, lie much nearer the surface.

CAUTIONS.

The greatest care should be exercised in handling both the poisoned grain and the bisulphide. Bisulphide is inflammable and highly explosive and should never be opened in the vicinity of a light or fire. The poisoned grain should never be placed where it may be reached by cattle, hogs, or poultry.

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Approved:
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